

Ventilation Checklist

For Residential Units

Address Information:

Make a selection from the list below for the ventilation system that will be installed in the residential building located at:

CIVIC ADDRESS

Heat Recovery Ventilator System (HRV)

HRV installations must conform to the CSA-F326 standard or to the referenced guidelines in the 2018 BC Building Code. Note that HRVs can be used either independently or in conjunction with forced warm air heating systems.

Passive System

Passive systems are permitted in buildings of one storey, less than 168 m² (1,800 ft²) in floor area, and where non-forced air heat is being used throughout. Passive inlets are required in all bedrooms and one in a common living area. They must be a minimum of 1.8 m (6') above the floor and have an unobstructed vent area of 25 cm² (4 in²). A 75 CFM principal exhaust fan will work for up to 5 bedrooms and must run continuously at a maximum 1.0 sone rating. No supply air fan required. This system can also be used in secondary suites where recirculation of air is not permitted between dwelling units.

Central Recirculation Ventilator System

4" ducting is provided to all bedrooms and an inline "Y" is installed to pull in outside air. Air can either be supplied or exhausted to the bedrooms. If supplied to the bedrooms, the inline supply fan must also pull air from the outside and a common living area. If exhausted from the bedrooms, the inline fan must pull in outside air and exhaust into a common living area. The inline fan must have at least the same CFM rating as the principal exhaust fan. A 75 CFM principal exhaust fan will work for up to 5 bedrooms (up to 3,000 ft² of living space) and must run continuously at a maximum 1.0 sone rating.

Forced Warm Air Heating

The furnace fan must run continuously. If the furnace fan has variable speeds, it can be set no lower than the required CFM rating of the principal exhaust fan. A 75 CFM principal exhaust fan will work for up to 5 bedrooms (up to 3,000 ft² of living space) and must run continuously at a maximum 1.0 sone rating.

Minimum Performance Requirements for Appliances Installed in Residential Buildings

Equipment Type	Size	Performance Requirement
Space Heating Equipment		
Gas-fired furnace	Less than 220,000 TU/Hr (66 kW)	Annual Fuel Use Efficiency (AFUE) must be greater than or equal to 92%
Gas-fired boiler	Less than or equal to 300,000 TU/Hr (88 kW)	Annual Fuel Use Efficiency (AFUE) must be greater than or equal to 90%
Air-cooled unitary air conditioner and heat pump split system	Less than or equal to 65,000 TU/Hr (19 kW)	Seasonal Energy Efficiency Rating (SEER) of 14.5 or Energy Efficiency Rating (EER) of 11.5
Gas-fired tankless	Less than or equal to 250,000 BTU/Hr (73.2kW)	Energy Factor (EF) must be greater than or equal to 0.8
Service Water Heating Equipment		
Electric storage	13-71 Gal (50 to 270 L)	Standby loss less than or equal to 25+ 0.20V (top inlet) 40+0.20V (bottom inlet) Where V=the tank volume (in litres)
Gas-fired storage	Less than 75,000 BTU/Hr (22 kW)	Energy Factor (EF) must be greater than or equal to 0.67-0.0005V Where V=the tank volume (in litres)
Gas-fired tankless	Less than or equal to 250,000 BTU/Hr (73.2 kW)	Energy Factor must be greater than or equal to 0.8